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## 2 Shibari: Double Hanging During Consensual Sexual Asphyxia

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4 Paolo Girardi · Stefano Ferracuti

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19 light on this practice and facilitate treatment.

20  
21 **Keywords** Sadomasochism · Autoerotic asphyxia ·  
22 Forensic psychology · Paraphilic disorders · Shibari  
23

### 24 Introduction

25 Voluntary sexual asphyxia is a type of asphyxiation that is  
26 induced to increase sexual gratification. This paraphilia is not  
27 sufficiently common to be included as a specific disorder in the  
28 *Diagnostic and Statistical Manual of Mental Disorders*  
29 (DSM-IV-TR) (American Psychiatric Association, 2000)  
30 and *International Classification of Diseases* (ICD-10)

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(World Health Organization, 1992). It is a dangerous form of  
31 sexual masochism involving sexual arousal by oxygen  
32 deprivation (hypoxophilia) achieved by ligature, plastic bags  
33 or chest compression. In most cases, hypoxophilia represents  
34 a form of paraphilia called BDSM. This compound acronym  
35 is derived from the terms bondage and discipline (B & D),  
36 dominance and submission (D & S), and sadism and maso-  
37 chism (S & M). BDSM encompasses a wide spectrum of  
38 activities that include being physically restrained through the  
39 use of handcuffs, cages, chains, and ropes; receiving pun-  
40 ishment or pain by means of paddling, spanking, whipping,  
41 burning, beating, electrical shocks, cutting, rape, and muti-  
42 lation; psychological humiliation and degradation may also  
43 be involved. Shibari is a form of BDSM. The term is a Japanese  
44 word that means to tie or to bind. It is used in Japan to describe  
45 the artful use of twine to tie objects or packages. It involves the  
46 use of thin pieces of rope to bind the submissive partner in  
47 ways that are meant not only to be artistically beautiful, but  
48 also to heighten the sensation of orgasm. In a recent Australian  
49 study (Richters, De Visser, Rissel, Grulich, & Smith, 2008),  
50 out of a representative sample of 19,307 respondents aged  
51 16–59 years interviewed by telephone, 1.8 % of the sexually  
52 active people (2.2 % of the men, 1.3 % of the women) said they  
53 had been involved in BDSM in the previous year.  
54

Paraphilias are often found in borderline personality dis-  
55 order (BPD). BPD is a serious mental health problem char-  
56 acterized by unusual levels of instability in mood, idealization  
57 and devaluation episodes, a disturbance in the individual's  
58 sense of self, and unstable interpersonal relationships, self-  
59 image, identity, and behavior. BPD patients are difficult to  
60 treat, have an increased death rate, often present self-harm  
61 behaviors, and are subject to intense emotional dysregulation.  
62 In their study on sexual practices in BPD patients, Zubenko,  
63 George, Soloff, and Schulz (1987) found that 11 % of the  
64 patients also had a diagnosis of paraphilia.  
65

66 Women with BPD frequently adopt complicated sexual  
 67 behaviors (Neeleman, 2007) and exhibit marked impulsivity  
 68 and a temperamental disposition toward sensation-seeking  
 69 (Cloninger & Svrakic, 2000), which exposes them to high-  
 70 risk sexual practices. Most women with BPD have an inse-  
 71 cure attachment style (Levy, Meehan, Weber, Reynoso, &  
 72 Clarkin, 2005) and consequently tend to have sex to reassure  
 73 themselves that their partner cares about them and to capti-  
 74 vate their partner's attention.

75 Many studies have been conducted to identify specific  
 76 variables that correlate with the development of BPD. Two  
 77 studies have suggested that 60–90 % of women with BPD  
 78 have experienced childhood sexual abuse (CSA) (Yen et al.,  
 79 2002; Zanarini, Frankenburg, Reich, Hennen, & Silk, 2005).  
 80 Indeed, numerous studies on the relationship between BPD  
 81 and CSA have reported that the two phenomena are closely  
 82 associated (Katerndahl, Burge, & Kellogg, 2005; McLean &  
 83 Gallop, 2003; Ogata et al., 1990; Soloff, Lynch, & Kelly,  
 84 2002; Trull, 2001; Weaver & Clum, 1993; Zanarini et al.,  
 85 2002). In a meta-analysis of 37 studies involving over 25,000  
 86 subjects, Oddone Paolucci, Genuis, and Violato (2001) found  
 87 that sexual abuse in childhood was associated with promis-  
 88 cuity in adulthood. In a review of 42 empirical studies, Be-  
 89 itchman, Zucker, Hood, daCosta, and Akman (1991) came to  
 90 the same conclusion. Sansone, Gaither, and Songer (2002)  
 91 found that childhood abuse was associated with BPD and that  
 92 self-harm behaviors and multiple types of abuse were more  
 93 likely to precipitate self-harm behavior. Clinically, this sug-  
 94 gests that patients who display high degrees of self-harm  
 95 behavior have probably been subjected to multiple forms of  
 96 childhood abuse.

97 In this report, we present a fatal case of double hanging  
 98 consensual sexual asphyxia, with a summary of the event, the  
 99 autopsy findings, and a psychiatric evaluation of the surviving  
 100 participant. Cases in the literature regarding deaths resulting  
 101 from asphyxiation induced to achieve sexual arousal focus  
 102 primarily on either males (Quinn & Twomey, 1998; Sauvageau  
 103 & Racette, 2006) or females (Byard, Hucke, & Hazelwood,  
 104 1993; Gosink & Jumbelic, 2000) involved in autoerotic prac-  
 105 tices. Only one previous study described sexual asphyxia prac-  
 106 tices in a couple (Oklota, Niemcunowicz-Janica, Sackiewicz,  
 107 Ptaszynska-Sarosiek, & Szeremeta, 2010).

## 108 Case Report

109 After having consumed a light dinner accompanied by a large  
 110 quantity of alcohol, two young women (SU and DE) and an  
 111 older Italian man went on to play an erotic game that included  
 112 bondage practices in an isolated, public location at about 4 am  
 113 that night. The two women, who remained dressed, without  
 114 either exposing their genitals or receiving sexual stimulation,  
 115 were tied to each other in a sort of pendulum so as to

counterbalance each other, thereby practicing a Japanese  
 116 erotic figure (Shibari). The ropes were slung over metal tubes  
 117 in the basement of a local federal income tax building  
 118 underground. When one woman went down, the other one  
 119 went up, thus causing a feeling of suffocation that was con-  
 120 sidered sexually arousing. While this game was being played,  
 121 DE fainted (and lost urine), which resulted in SU remaining  
 122 suspended and in both her and SU being asphyxiated for an  
 123 extended period of time. As the man involved in the game did  
 124 not have a knife at hand, he was unable to cut the rope  
 125 immediately. When he did manage to release the two women,  
 126 DE was dead and SU was in critical condition. The man was  
 127 arrested and is presently awaiting trial.

## 129 The Victim: Autopsy Findings

DE, who was 23 years old, 171 cm tall, and weighed 121 kg  
 130 (BMI = 41.38), was found with 4 ropes that had been used to  
 131 tie multiple knots around her joints and had been passed several  
 132 times around her chest. The death can be ascribed to violent  
 133 mechanical asphyxia. Indeed, the ridges found in the cervical  
 134 region during the external examination and the underlying  
 135 hematic infiltrations were considered to be clear signs of  
 136 hanging. The external examination of the cadaver revealed  
 137 signs of cervical compression, indicating that a rope had been  
 138 passed around the neck at least twice. The histological exam-  
 139 ination confirmed the nature of the lesions, thus proving that  
 140 they did not result from the suspension of the cadaver, but had  
 141 been caused by a harmful object on a living subject. The toxic-  
 142 ical tests disclosed the presence of a moderate quantity  
 143 of alcohol and cannabinoids in the blood, though these sub-  
 144 stances were not directly involved in the young woman's  
 145 death. The woman had history of psychiatric treatment.

We define this event as an incomplete hanging, in which  
 147 the death may be ascribed not only to asphyxiation, but also to  
 148 vascular and autonomic nervous processes. The reason to  
 149 why DE died and SU did not may lie in differences in the  
 150 young women's response to asphyxia as well as in the degree  
 151 of compression exerted by the ropes on the chest.

## 153 The Survivor

SU, who is 24 years old, 164 cm tall, and weighs 83.60 kg  
 154 (BMI = 30.85), was untied where the event had occurred and  
 155 was taken to the hospital emergency ward because of acute  
 156 respiratory failure that required ventilatory support. The  
 157 acute respiratory failure was caused by prolonged asphyxia,  
 158 caused by a rope that had been wound around the young  
 159 woman's neck. Upon admission to Sant' Andrea Hospital, SU  
 160 had severe acute respiratory failure and was in a coma  
 161 (GCS = 3). The alcohol level in her blood was 1.08 and there

were traces of cannabinoids in her urine. The coroner (who also examined SU) observed the presence of "red marks around the patient's neck that could be ascribed to strangulation." SU was hospitalized in intensive care, where she underwent a CT scan, a chest CT, an MRI, and an EEG. These diagnostic tests did not disclose any pathologically significant findings. Some days later, when SU had regained her alertness, orientation in time and space, and was hemodynamically stable and breathing spontaneously, she was transferred to the internal medicine ward. It was in this ward that she first came into contact with a psychiatrist, which led to a series of interviews, even following her discharge from hospital, and to the administration of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-ICV) (First, Spitzer, Gibbon, & Williams, 1997a), the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II) (First, Spitzer, Gibbon, & Williams, 1997b), and a psychodiagnostics battery of tests. During the first psychiatric interview, the patient said she could not remember anything regarding the "accident," this probably being due to the strong neuronal damage caused by the prolonged hypoxia.

SU reported to have achieved all the normal development milestones and had successfully attended elementary school. SU, who is an only child, stated that from the age of 12 years her father (salesman for a construction company) had often been absent for business reasons, sometimes even for months. SU reported that he was physically violent towards her mother, even in her presence; during the disputes, the father screamed and slapped the mother but was never violent towards his daughter. Despite the many family rows, police intervention was never required nor were there any complaints or hospitalizations for beatings. Her mother (a civil servant) was described as an excessively authoritarian woman; SU reported that her mother often took decisions, not allowing her to make choices independently. Therefore, from a relational point of view, the parents appeared dysfunctional. There were no cases of mental illness in her family history. SU grew up with a lot of babysitters as her parents got home from work very late in the evening. She described the relationships with the baby-sitters as shallow and did not preserve a meaningful memory of any of them. She reported a single incident of sexual abuse at the age of 11 years by a person outside the family entourage. SU related that the abuser was about 50 years old, though she refused to say more about this episode because she found the memory too painful. According to her statement, SU immediately informed her parents of the abuse but they decided not to report it to the police so as not to have go through the time-consuming procedure. She said "This made me feel very empty." Following the abuse, SU started consuming cannabis before going on to hallucinogens, cocaine, and heroin. In order to treat this addiction, at the age of 16 years, she entered a therapeutic community for substance abusers and stayed there for 3 years. While in this

community, she gradually reduced her substance abuse, although she admitted to still being a regular cannabis consumer. She said "I get anxious and confused, but after I consume cannabis my thoughts become clearer."

As an adolescent, the patient also had a history of non-suicidal self-harm behavior. From the age of 12 years, she had often cut herself with razor blades or intentionally burned herself. She said "At first they were cleansing acts; I always feel dirty; I started because I can always smell the man who abused me. The pain helps me to feel myself." In particular, SU described this smell as a pseudohallucination. The patient's clinical history did not include psychotic symptoms.

SU started menstruating at the age of 10 years. Her period was not regular until she started taking the birth-control pill at the age of 18 years. Before adopting this contraceptive method, she had used condoms and had never become pregnant. She did not suffer from premenstrual syndrome. From the age of 12 years, SU used her sexuality as a bargaining chip to obtain drugs or other material goods. She did not report having had any homosexual relations. She said that her main source of sexual satisfaction was masturbation, though she did not report any peculiar sexual fantasies in this regard. Throughout her life, SU's personal relationships have been marked by emotional instability. She never had any close friends and none of her relationships lasted more than a few months. All her personal relationships were characterized by alternating love and hate, idealization and devaluation, with a stable sense of the other person never being achieved. She reported having difficulty in controlling her anger in all her relationships. The only important love affair she had had was with a drug abuser who was much older than she was, though the relationship was not sexually satisfying because the man suffered from impotence.

SU succeeded in obtaining a school-leaving certificate and in getting a job. She related that she had become interested in sexual masochism only 9 months before the accident and she had performed BDSM several times with different partners. She said "I was sad and bored and I tried BDSM simply out of curiosity. I wanted some excitement. After someone had spoken to me about this practice, I made a search on internet and found films that aroused my curiosity." SU came into contact with a community of sadomasochists online, with whom she attended some meetings and met partners. The patient also experienced other dangerous erotic games, such as the use of whips or fire to achieve sexual pleasure. She said "The initial pain turned into pleasure, I got pleasure from playing these games." SU denied the danger of these sexual practices, being only superficially aware of the threat they may pose to life, explaining that these erotic games have an escape or a fail-safe mechanism. When told that her partner had died, she cried for a couple of minutes, making a superficial facial expression and few physical movements. In the following 10 min, as well as during the other psychiatric sessions, she smiled spontaneously during the conversation.

269 In the days following her partner's death, she appeared to  
 270 be superficially upset and reported the desire to be "asexual."  
 271 According to her medical history, the patient had not previously  
 272 undergone any psychiatric pharmacological therapy,  
 273 but only psychotherapy performed on and off for 3 years,  
 274 though with limited improvements. She said that she had  
 275 undergone psychotherapy to treat depression, revealing only  
 276 a small part of her sexual practices to the therapist, who  
 277 according to SU did not display much interest or ask any  
 278 specific questions in this regard. While undergoing psycho-  
 279 therapy, SU had continued taking illicit substances but had  
 280 ended cutting. The psychotherapy was ongoing at the time of  
 281 the fatal incident.

282 SU said that her family not only felt that the publicity her  
 283 sexual practices had aroused had violated their privacy but that  
 284 the investigation and interviews had had an upsetting effect on  
 285 her parents and friends. Her closest relatives were not aware of  
 286 the victim's autoerotic activities and her mother had addressed  
 287 the issue of SU's and the victim's privacy by saying that the  
 288 news in the media had caused great embarrassment.

289 She completed the Wechsler Adult Intelligence Scale-  
 290 Revised (WAIS-R) (Wechsler, 1981), the Millon Clinical  
 291 Multiaxial Inventory (MCMI-III) (Millon, 1994), the Minne-  
 292 sota Multiphasic Personality Inventory-2 (MMPI-2) (Butcher,  
 293 Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), and  
 294 Raven's Progressive Matrices (PM-38) (Raven, 1938). Her  
 295 Full-Scale IQ on the WAIS-R was 96, with no significant  
 296 differences between Verbal (IQ = 94) and Performance  
 297 (IQ = 99) or between subtests. On the PM-38, she fell within  
 298 the 50th percentile, which indicates a medium abstraction  
 299 ability. On the MCMI-III (Personality Code: 6A3\*\*2A2B\*  
 300 6B458A1+8B\*\*7//C\*SP+; Syndrome Code: T\*\*A\*\*//CC\*\*SS\*),  
 301 she scored over 85 points in scale C (Borderline), a serious  
 302 personality scale, and in the 6A (Antisocial) and 3 (Depen-  
 303 dent) personality scales, indicating the possible presence of  
 304 those personality disorders, while her scores on scales 2A  
 305 (Avoidant) and 2B (Depression) were between 75 and 84  
 306 points. On Axis I, scale T (Drug Addiction) was over 85  
 307 points. SU's overall constellation, which was seriously dis-  
 308 turbed, corresponded to a personality with disorganized  
 309 behavior, inadequate affectivity associated with fear and  
 310 mistrust of others, though with a combative temperament.  
 311 SU's marked depression also emerged, as did a history of  
 312 substance abuse and difficulty in controlling impulses. On  
 313 the MMPI-2 (Welsh Code: 49'708615-23/F-L:K#TRIN:  
 314 VRIN:Fb'), she scored high on two clinical scales (Hypo-  
 315 mania and Psychopathic deviance) and on three Content and  
 316 Supplementary Scales (OBS, ASP, MAC-R). The profile that  
 317 emerged pointed to alienation from society, impulsivity, low  
 318 tolerance of frustration, and alcohol consumption.

319 According to the DSM-IV-TR, the patient's clinical  
 320 phenomenology was congruent with a diagnosis of Past Mul-  
 321 tiple Substance Dependence (F19.20), Sexual Masochism

(F65.5), and Borderline Personality Disorder (F60.31). There  
 322 were also some elements of Bipolar Disorder NOS. 323

## 324 Discussion 324

This report differs from most previous reports of asphyxia  
 325 fatalities insofar as the latter were mainly of solitary men and  
 326 women. In this report, we analyzed a case of a masochistic  
 327 game called shibari, played by two young women that ended  
 328 in death for one of them. This case is relevant to therapeutic  
 329 and social issues because it sheds light on a little-known  
 330 practice. 331

The three protagonists involved in the event met on-line.  
 332 While playing shibari, the victim, who was severely obese  
 333 and had a history of psychiatric treatment, died as a result of  
 334 violent mechanical asphyxia; the survivor suffered severe  
 335 respiratory failure and was comatose. One noteworthy issue  
 336 that emerged from the reconstruction of this event was the  
 337 lack of safety during consensual erotic games. Death as a  
 338 result of asphyxia games is unlikely to occur when another  
 339 participant and a supervisor/instructor are involved. In this  
 340 case, the master was unable, as he did not have a knife at hand,  
 341 to interrupt the state of equilibrium between the two young  
 342 women, who were bound to each other with ropes, one of  
 343 which passed around their necks. Part of the excitement  
 344 induced by BDSM is attributed to the complete trust required  
 345 between the dominant and submissive partners, the emotional  
 346 ties during play often being very powerful. The two women  
 347 clearly overestimated the instructor's technical skills and  
 348 underestimated the possible consequences of his impaired  
 349 lucidity due to the consumption of alcohol and cannabinoids.  
 350 When engaging in consensual masochistic games, it is man-  
 351 datory that basic safety procedures and tools should not be  
 352 forgotten; indeed, participants should be aware that fatalities  
 353 in asphyxia games occur when the escape mechanism fails  
 354 or the participants become unconscious through hypoxia.  
 355 Although numerous fatalities have been reported, few stud-  
 356 ies have focused on the treatment or prevention of asphyxia  
 357 in such circumstances (Behrendt, Buhl, & Seidl, 2002). 358

The survivor presented unequivocal signs of inadequately  
 359 treated BDP and its consequences. After a childhood of  
 360 loneliness with no reference figures of any importance, she  
 361 suffered sexual abuse, which was downplayed by the parents  
 362 who decided not to report the crime. The patient's BPD traits  
 363 appear to have started at that time, even if it is clearly the  
 364 outcome of an affection-deprived childhood and adoles-  
 365 cence. The traits that emerged from the survivor's clinical  
 366 picture were drug consumption and addiction, non-suicidal  
 367 self-harm behavior, distorted sexual behavior, and emotional  
 368 instability in relationships. Lastly, her masochistic sexual  
 369 behavior was triggered by a general sense of sadness and a  
 370 desire for excitement. The young woman's clinical history  
 371

372 reflected unsuccessful psychotherapeutic treatment, which  
 373 highlights the possible need for psychotherapists to focus on  
 374 the prevention of dangerous behaviors in BDP patients and on  
 375 the involvement of people with psychiatric disorders in these  
 376 extremely dangerous games. If the psychotherapist had  
 377 investigated SU's new sexual interest in more detail, the  
 378 tragic outcome might have been prevented in this case. It  
 379 should, however, be borne in mind that, owing to the lack of  
 380 information available on sexual masochistic rituals in our  
 381 culture, it may have been impossible to offer a rational  
 382 treatment package.

383 The fact the victim also presented a psychiatric disorder,  
 384 and that both women had attended courses in sadomasochistic  
 385 practices, raises questions regarding the involvement of people  
 386 with psychiatric disorders in these extremely dangerous  
 387 games. Moreover, neither of the young women had checked  
 388 whether the instructor had the equipment required to perform  
 389 the game safely, which may also be related to their personality,  
 390 and all the participants had been drinking alcohol.

391 The case presented here also highlights some ethical  
 392 issues, including upsetting a family and local community  
 393 during an investigation as well as the effects of news released  
 394 by the media on the memory of the victim among relatives and  
 395 friends. Strict privacy procedures need to be designed and  
 396 implemented in order to avoid any negative social impact,  
 397 even though information is an important means of raising  
 398 awareness among the public about the dangers of various  
 399 forms of erotic asphyxia.

400 Lastly, this case also raises issues regarding the increasingly  
 401 widespread availability of paraphilia and pornography in our  
 402 society, which warrants further research as well as effective  
 403 preventive measures. In Italy, there is a general social intolerance  
 404 to sexual paraphilias, which are greatly stigmatized  
 405 within an enduring patriarchal social system. However, owing  
 406 to the ease with which access can be gained to paraphilias  
 407 (knowledge and images through internet), paraphernalia and  
 408 pornography by both individuals and organized groups, the  
 409 number of cases of lethal paraphilic syndromes have increased  
 410 recently and may rise even further in the future unless a  
 411 widespread sexual education campaign, including such syndromes,  
 412 is conducted. Moreover, psychiatric disorder, such as BPD,  
 413 probably accounts for the increased mortality rate  
 414 because it is characterized by impulsivity and low self-protection.  
 415 Given the number of fatalities that result, or may result  
 416 from this practice, this topic warrants further research and that  
 417 more case studies of living participants should be collected.

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